

DEC Comments and Questions regarding EPA Chuitna Iron and Manganese Documents

Powell and McGee - 12-29-10

Overall Comments:

First, thank you very much for allowing DEC to see the documents ASAP. Here are some questions and comments organized by page and paragraph.

A) ORD Document

1) pg. 1, para. 2 – regarding “adaptive management”, Considering SSC’s usually takes 2-5 years to develop and for a revision would again require the same timeframe, WQS might better be considered an outcome of adaptive management practices. “Adaptive management, is defined as resource management based on the science of learning by doing (Walters 1986, Gunderson 1999, Lee 1999)” – cited from “Principles of Ecosystem Stewardship” by Chapin, Kofinas, and Folke, 2009. Considering the temporal considerations of WQS/SSC development alone, there are other processes and activities that are a better institutional fit. Aspects of Adaptive Management such as monitoring, testing, experimentation are perhaps a more appropriate fit and best accomplished in the context of a permit.

2) pg. 1 para. 4 & pg. 2 para 1 - we agree with author that “ as presented (the data) is not sufficient temporally or spatially”. Along those lines we have asked the applicant to:

- specifically delineate reaches of stream that the SSC applies instead of entire basins and general areas.

- pair chemical and physical data

3) pg. 1 last para. - regarding sources of natural background (oil and gas exploration and logging), there has been, and is anticipated to be, no or de minimis impact from oil and gas or logging activity.

4) pg. 2, para. 5 – Regarding a larger data set, our consultant has not determined yet that a larger data set is necessary. We have asked, as previously mentioned that the biological and chemical data be paired.

- 5) pg. 3, para 2 – Agree with the statement that “no difference exists based on failing to reject the null hypothesis.”

6) pg. 3, para 4 – We may be able to benefit from the comments from this new method, however we cannot hold up or base our review on this method until it is finalized. And even when it is finalized the basis for using this new method as part of EPA review is unclear.

7) pg. 4. Para 1- agree that biological and chemical samples should be co-located in space and time and that the low population density and in the region provides sampling sites that provide very credible measures of background levels.

8) pg.4, para 2 – Using the adaptive management approach in the context of the permit is appropriate but not in the context of establishing a water quality standard.

Ms. Joyce Donahue's Manganese Memo Dated November 10, 2010,

- 1) HHAWQC – is this a term to generally refer to this specific proposal or a reference for something else?
- 2) Why 0.05 instead of 0.14 for the Reference dose?
- 3) Why is the children's value used when the standard or conventional application uses the adult value?